Summary of Recommendations for the Bear Creek Watershed

Recommendations from Soils Chapter

Listed in order of importance

Restoration and Protection for Improving Conditions

1. Improve fence exclosure areas in Chaparral Hollow and Commissary Ridge by scarifying soil, seeding and mulching. Continue to restore deteriorated rangelands through soil and water improvement projects.

2. Close and (where appropriate) obliterate roads and trails that are not on the transportation system map. Using roads analysis, identify unnecessary roads and trails that are poorly/improperly designed/maintained, are causing ecological problems and continue to erode. Relocate and redesign system roads and trails that are chronic erosion/sediment producers.

3. Restrict recreation use along riparian corridors, where possible, to improve riparian conditions.

4. Many areas with mountain big sagebrush appear to be suitable for prescribed fire treatments that could be applied to improve age class diversity and improve vigor in the understory. These kinds of treatments usually have a positive effect on ground cover in the following years after treatments occur showing measurable decrease in erosion.

5. In historical areas of aspen with conifer encroachment sagebrush appear to be suitable for prescribed fire treatments that could be applied to improve age class diversity, regeneration, retard conifers and improve vigor in the understory. These areas are typically where soils have a mollic epipedon. These kinds of treatments usually have a positive effect on soils.

6. Limit off-road travel and user-created trails and roads.

7. Improve camping sites and provide an area for horses at the Hot Springs to reduce erosion and limit expansion of sites.

8. Update range allotment Annual Operating Instructions to improve livestock management in riparian areas. Implement utilization standards and stream bank disturbance guidelines where possible. Ensure soil quality standards are followed in riparian areas to avoid detrimentally compacted soils. Installation of riparian

pastures and additional exclosures should be considered to reduce impacts on wetlands and riparian areas.

9. Strive to achieve properly functioning conditions for ecological types in the watershed by applying vegetation treatments that are ecologically sound.

Inventory and Monitoring

1. Soil and water improvement projects should be identified in a watershed improvement plan. The plan should include specific projects related to recreation and grazing management and treatments required to improve or maintain soil and watershed resources.

2. Establish erosion monitoring program for management activities related to grazing.

3. Establish monitoring program for ground cover on a variety of ecological sites by establishing nested frequency transects.

4. Establish monitoring program for landslide occurrences to determine if they were caused by management actions.

5. Establish monitoring program for shoreline erosion/protection on Palisades Reservoir.

Recommendations from Water Chapter

This section is broken into two areas: on the ground "action items" and "information needs and recommended management considerations". The action items are evaluated in two ways. The first rating evaluates the risk of no action while the second rates the benefit of implementing the recommendation. Items are listed in priority order.

Risk of no action: A rating is a best fit and does not need to meet all criteria.

High: Impacts are and will continue degrading conditions. Impacts are at the watershed or key subwatershed scale.

Moderate: Impacts may continue but some action has been taken to slow effects. Impacts are at the subwatersheds scale.

Low: While impacts may continue, they are localized problems and are not expected to affect conditions at the subwatershed scale.

Benefit to Resource:

High: The action would reduce impacts at the watershed or key sub-watershed scale.

Moderate: The action would reduce impacts at the subwatershed scale.

Low: The action would improve conditions at the local scale.

Restoration and Protection for Improving Conditions

Action Items:

1. Improve riparian/grazing management in the upper reaches of Bear Creek and North Bear Creek. Specifics need to be developed at the project level but could include riparian exclosures or reduced use levels. The emphasis should be on improving riparian ground cover.

   High. Rangeland impacts are resulting in surface erosion and some bank impacts. Maintaining existing trends would adversely affect stream conditions in these, as well as downstream reaches. This would be inconsistent with state and federal requirements for managing 303(d) listed streams.

   High. These subwatersheds would greatly benefit from improved riparian conditions. Improved riparian conditions would improve ground cover and bank stability, eventually leading to reduced sediment production. Eventually, substrate conditions and fish habitat would improve. These subwatershed scale improvements would also benefit the lower Bear Creek reach as less sediment is routed downstream.

2. Upgrade the Pine Creek culvert on the Elk Creek road. This culvert is at risk of overfilling and ditch capture.

   Moderate. While the culvert is currently functioning, it is undersized and connected to the ditch on the downhill side. Ditch capture could result in gully formation and substantial sediment production in the 303(d) listed Bear Creek. This would be inconsistent with state and federal requirements for managing 303(d) listed streams. Since this area is located in the lowest reach of the lowest subwatershed, the negative effects would be limited to lower Elk Creek and the portion of Bear Creek between the Bridge and the reservoir.

   Moderate. This action would reduce risk to lower Elk Creek as well as the lower section of Bear Creek. It would not change current conditions.

3. Improve the 077-Road in the vicinity of the Bear Creek Stream Crossing. This section of road is a primary sediment source in the headwaters of this system.

   Low. While this road is producing sediment, this material is being stored in the existing beaver complex. It is extremely unlikely that changes would be detectable in the lower reach of this subwatershed.

   Low. This action would reduce sediment inputs into the upper reach of Bear Creek. However, this reach is primarily a beaver

complex, where the substrate would continue to be dominated by silts. It is extremely unlikely that improvements would be detectable in the lower reach of this subwatershed.

4. Reduce sediment production from South Fork trailhead access road (083). The access road is producing sediment via dust in dry weather and ruts in wet weather. Reductions could be obtained by moving the trailhead back to the ridge (before dropping into the South Fork) or making physical improvements.

   Low. While this road is producing sediment this material is being stored in the existing beaver complex. It is extremely unlikely that changes would be detectable in the lower reach of this subwatershed. While this is a minor sediment source, it the only obvious management related one in this subwatershed.

   Low. This action would reduce sediment inputs into the upper reach of the South Fork Bear Creek. However, this reach is primarily a beaver complex, where the substrate would continue to be dominated by silts. It is extremely unlikely that improvements would be detectable in the lower reach of this subwatershed.

5. Reduce off road vehicle impacts in the reservoir reach.

   Very Low. While off road vehicles are impacting the channel, through the mud flats, these impacts are effectively erased every year as the waters rise. Therefore there would be no moderate duration (1-5 years) long-term (5+ years) impacts.

   Very Low. This reach is inundated for most of the year. Any improvement would be very short-term (<3 months), occurring only when the reservoir is at low pool. Since this is the lowest reach of the watershed, and the main reservoir is immediately below, there would be no downstream effects.

Inventory and Monitoring

Information Needs/Management Considerations

1. Riparian conditions along minor tributaries should be surveyed to determine watershed effects and stream conditions.

Recommendations from Fisheries Chapter

Restoration and Protection for Improving Conditions

Remove the impassable culvert at FS Road 063 where it crosses an unnamed tributary to West Fork Elk. Create a trailhead at this location and construct a trail bridge over the tributary. The road beyond this point would be converted to a trail that would extend to the historic trailhead. This would open up an additional mile of habitat for Yellowstone cutthroat trout in West Fork Elk Creek and decrease road-related sedimentation from FS

Road 063. If the additional 2 miles of road are needed beyond this crossing for some other resource reason, replace this culvert with a bridge or bottomless arch to insure upstream passage of fish. The slope of the stream at this crossing does not facilitate the placement of a culvert with the intent of successful fish passage.

Inventory and Monitoring

Perform a Caribou-Targhee Forest Fish Distribution Survey on Elk and West Fork Elk Creeks.

Recommendations from Wildlife Chapter

Restoration and Protection for Improving Conditions

1. Management Projects need to continue on some scale to better manage off highway vehicle use in the watershed year-round, particularly in fall hunting season and snowmobile season in big game winter range.

2. Have an annual meeting just to discuss coordination needs and measures between Forest Service managers in the watershed and Idaho Department of Fish and Game for management of the adjacent Tex Creek Wildlife management area. A memorandum of understanding between agencies may be needed to help prioritize this effort. Big game which winter in Tex Creek travel through and summer in this watershed.

3. Do riparian improvement work (e.g. erosion control) and willow planting projects in Bear Creek including the upper portion, South Fork and lower parts above the reservoir on some small scale as needed. Work with beaver to help keep them viable in the watershed.

4. Better manage motor vehicle use in riparian habitats, particularly dispersed recreation in Elk Creek and South Fork of Bear (e.g. use of large boulders to control vehicle access and signing). Some of this work has already been done.

5. Consider cooperative work with special use permit holders at summer homes to help them make their homes and areas safer against fire while retaining the larger trees for shading and habitat for wildlife in the Calamity area. Recent research has found that removing the larger trees does not improve fire safety. It is the smaller ladder fuels and brush that is the problem. Larger trees retained actually maintain shading and less drying of fuels around homes and surrounding forest. Emphasis should be on homeowners using fire resistant materials in their build. Many homes which have burned in recent wildland/urban interface fires have done so from blown in material with larger live trees left standing next to the house. We need to apply the most recent fire protection science here.

6. Continue to apply the guidelines of the Palisades Reservoir Bald Eagle management plan to the Van Point eagle territory and evaluate the needs of foraging eagles along the north shore of Van Point with the placement of ski docks as originally stated in the eagle plan. The Plan calls for docks not to be placed in certain locations until after certain dates in the summer during the nesting season.

Inventory and Monitoring

1. Do Beaver Inventory, mapping and survey for present and past use.

2. Do aspen condition inventory to determine the proper treatment of existing clones (e.g. fire, cutting, logging).

3. Work with the Wildlife Management Institute in Jackson Hole through the Caribou–Targhee cost share agreement to assist in documenting wolverine use in the Bear Creek watershed.

Recommendations from Forested Vegetation Chapter

Restoration and Protection for Improving Conditions

1. Continue to allow firewood gathering along existing roads in the analysis area.
2. Although very limited, conifer removal should be encouraged where accessible and where resource damage is minimal to include small harvest sales to improve forest health.
3. Use of fire treatment for aspen self-regeneration should be encouraged.
4. Encourage treatment activities that will take stands back to early to mid succession stages.
5. Recommend that a Wildland Fire Management Plan be developed for the analysis area.

Inventory and Monitoring

1. Continue to monitor insect activities in the area. Look for areas where management actions could be taken to slow or protect the stand.
2. Monitor annually, the insect build up around the development areas of the analysis area, particularly around private summer homes.
3. Complete stand exam inventories for analysis area. (Low priority).

Recommendations from Range and Livestock Chapter

Restoration and Protection for Improving Conditions

1. Continue a sustainable livestock grazing program while improving range conditions.

2. Modify any grazing related actions displaying negative impact to natural resources.

3. Actively try to control existing noxious weeds using an integrated pest management system.

4. Prevent new invasive species from becoming established in the watershed.

5. Continue to maintain watershed protection fences on Bear Creek Driveway.

6. Improve and maintain gully plugs, as needed on Little Elk Mountain and the Bear Creek Driveway protection areas.

7. Continue the system of using the original and rerouted driveway for getting sheep to their allotments.

8. Improve the Commissary Ridge and Fourth of July Ridge exclosures on the driveway by ripping, incorporating organic matter into the soil and revegetating.

9. Continue rest rotation systems on the sheep allotments in the watershed.

Inventory and Monitoring

1. Continue an active role in the local Coordinated Weed Management Area group, consisting of private, local, state and federal land management agencies in control of noxious weed.

2. Revise Allotment Management plans for sheep allotments in the analysis area to bring them in compliance with standards and guides specified in the Targhee Forest Plan.

3. Monitor all grazing allotments to insure compliance with standards and guides specified in the Revised Targhee Forest Plan, grazing permits, allotment management plans and annual operating instructions.

4. Monitor range land areas to determine long-term trend of range conditions.

Recommendations from Fire Chapter

Restoration and Protection for Improving Conditions

The following recommendations for restoration and protection improvements should be considered in order to improve the ecological balance within the watershed.

1. Use prescribed fire in specific areas of heavy fuel loading to reduce the chance of catastrophic or stand-replacement fire.

2. Reduce the ladder fuels through vegetation management projects within the analysis area where fuel loads are approaching 20 tons/acre in the timber types.

3. When possible and within management constraints allow fire to spread naturally within fire use guidelines. A fire use plan is in the development stages for the Caribou Subsection and expected to be completed in 2004.

4. Utilize prescribed fire within sage/grass, and mountain brush areas where species, age class, and composition indicate the need to restore the ecological balance within the analysis area.

5. Develop an aggressive aspen regeneration program in order to restore aspen habitat throughout the watershed.

Inventory and Monitoring

None

Recommendations from Recreation Chapter

Restoration and Protection for Improving Conditions

Trailheads

1. Redevelop Bear Creek Trailhead by: a) increasing parking space on the north side of the existing parking lot (against the mountain), b) replace existing trailhead facilities, c) completing the information board, and d) replacing the existing toilet with a CTX vault toilet.

2. Develop all trailheads within the analysis area. These are low priority project needs, but would serve to show the end of roads and beginning of trails.

Development to include; a) suitable parking: b) information board and signing, and c) appropriate barrier placement.

They are:

a. Big Elk Mountain (Trail 130)
b. Commissary Ridge (Trail 029)
c. Poker Peak (Trails 156, 158, 159)
d. Upper Bear Creek (Trails 084 and 140)

Trails

1. Trails (except Bear Creek, 047) within the analysis should remain primitive motorized in nature. Trails include 029, 042, 043, 044, 048, 049, 130, 140, 144, 146, 147, 148, 156, 157, and 159. Note the trail on the north edge of the analysis area (034) will be managed with the Fall Creek Drainage analysis area and is not part of this recommendation. Primitive motorized refers to trail tread width remaining similar to what exists now and not widened to facilitate wider vehicles (ATVs). Trail relocation should be considered for reducing soil erosion, but will normally require only change to short sections of the trail verse relocating entire trail length.

2. Bear Creek Trail (047) should be maintained to a high standard from the trailhead to the North Fork Trail junction. Trail tread should be reconstructed to a minimum width of 24 inches. Drainage and trail grade should be considered high priority in design planning. Information signing should be improved to inform users of the area and its resources protection measures.

3. Recommend changing travel plan to separate use between ATV and motorcycles trails. Develop a network of trails for ATV (Fall Creek) and limit them on more primitive narrow trails (Bear Creek). Revise Forest Travel Plan to restrict motorcycle use of 250cc engines and greater. Most damage to the trails and hill climbs are a result of larger machines with greater horsepower. ATV and motorcycle travel on the National Forest should be for trail riding and not motor cross experience

Dispersed Camping

1. Dispersed camping sites in the backcountry should remain rather primitive with no improvements, except the Warm Springs site. At the Warm Spring site, hitching rails and fire circles should be provided for user control. Site monitoring should be done on the sites along Bear Creek between the trailhead and the North Fork junction once every three years to determine if site rehab work is necessary.

2. Dispersed camping at the Tissue Point sites should be planned, designed and hardened. Vehicle access roads should be limited to those needed and graveled. Sanitation faculties should be provided. A second CTX toilet should be planned for this site. Information signing should be placed along the road for recreation user education. Sites along the Bear/Jensen Road should be clearly marked and limited in size by number of firerings to one per site.

3. ATV use related to dispersed camping will likely continue and increase over time. Much of this will occur around the Tissue Point area. While recognizing resource values below high water mark of the reservoir, but also understand that a trade-off of having ATV use on the reservoir is better than some place else in the analysis area. We, therefore, recommend that ATVs be allowed to use the reservoir below high water mark without restrictions.

Development

1. No new development is recommended at this time in the analysis area (except Tissue Point and trailheads mentioned above).

2. Recommend that vegetation management planning within 1 mile of the Palisades and Calamity Summer Home areas are completed and action is taken immediately to reduce fuel build up within this analysis area.

3. Summer home association and/or members should be given opportunity to review home site with fire management specialist and permit administrator concerning fire precaution management around their home site.

4. Fuel build up between the Calamity Campground and the summer home area should be removed as soon as possible to reduce risk of fire spread from campground to home area.

Winter Use

1. Wintertime use should remain open, but remain low key for most of the analysis area. Poker peak portion will be managed according to direction given to the remaining part of Poker Peak area (area to the south).

2. Groomed snowmachine routes should remain and be signed appropriately.

3. Dog sledding on groomed snowmachine routes should be avoided.

4. If the Snake River Road is snow plowed in the future and it is no longer used as a groomed snowmachine trail, we recommend that a winter parking facility be constructed some place in the gravel flat area to accommodate winter use.

Outfitting

1. Recommend that no additional hunting outfitting be allowed in the analysis area, with exception to special hunts such as cougar hunting.

2. Summer recreational outfitting is allowed based on the current outfitting capacity policy used by the district.

3. No reserved campsites will be allowed in the Warm Springs area, along the main fork of Bear Creek. All other sites may be considered under separate environmental study.

4. No motorized winter outfitting should be permitted within the analysis area, except
5. Poker Peak portion and Skyline Ridge Road portion of the analysis area, which may be considered.

6. Recommend that outfitter parking be provided some place other than the main Bear Creek Trailhead. The size of the trailhead is not adequate to handle both uses, even if redeveloped, during heavy use seasons.

7. Outfitter fishing should be restricted on the main fork of Bear Creek between the trailhead and the junction of the North Fork Trail. This is in response to the already heavy public use of this stretch of stream.

Inventory and Monitoring

None

Recommendations from Cultural Resources Chapter

Restoration and Protection for Improving Conditions

None

Inventory and Monitoring

1. Cultural resources need to be inventoried and documented.

Recommendations from Transportation Chapter

Restoration and Protection for Improving Conditions

1. Refer to Transportation Chapter

Inventory and Monitoring

1. Refer to Transportation Chapter